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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,324	09/15/2003	Harold D. Beck	03-11	3791
30699	7590	10/05/2005	EXAMINER	
DAYCO PRODUCTS, LLC 1 PRESTIGE PLACE MIAMISBURG, OH 45342			AUGHENBAUGH, WALTER	
			ART UNIT	PAPER NUMBER
			1772	
DATE MAILED: 10/05/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/663,324

Applicant(s)

BECK ET AL.

Examiner

Walter B. Aughenbaugh

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 11-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 20-22 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/15/03, 2/26/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-10 and 20-22, drawn to a tubular structure, classified in class 428, subclass 36.9.
  - II. Claims 11-19, drawn to a method for forming a tubular structure, classified in class 264, subclass 405.
2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as a process that does not include a vulcanizing step.
3. During a telephone conversation with Joseph V. Tassone on March 7, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-10 and 20-22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Art Unit: 1772

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Objections***

7. Claim 22 is objected to because of the following informalities: claim 22 depends upon claim 29, which is not a pending claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

8. Claims 1-10 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Igarashi et al.

In regard to claim 1, Igarashi et al. teach a vulcanized tubular structure (hose, col. 5, lines 49-50) comprising a composition containing a vinyl ester copolymer (ethylene-vinyl acetate copolymer, col. 3, lines 32-35 and col. 4, lines 22-26) where the vinyl ester copolymer contains greater than 40% vinyl ester based on the weight of the copolymer (col. 3, lines 48-51). Igarashi et al. teach that the tubular structure is automotive fluid-conveying (col. 2, lines 54-57). The tubular structure of Igarashi et al. is heat tolerant because Igarashi et al. teach that the tubular structure is heat resistant (col. 2, lines 50-54). Any hose is resistant to some degree of pressure, so the hose of Igarashi et al. is necessarily resistant to some degree of pressure. The tubular

Art Unit: 1772

structure of Igarashi et al. is hydrocarbon fluid impermeable since Igarashi et al. teach that the tubular structure is gas impermeable (col. 2, lines 50-53).

In regard to claim 2, Igarashi et al. teach the ethylene-vinyl acetate copolymer contains more than 60% vinyl acetate by weight of the copolymer since Igarashi et al. teach that the ethylene-vinyl acetate copolymer contains not more than 40 mol % ethylene (consequently, at least 60 mol % vinyl acetate, col. 3, lines 39-41).

In regard to claim 3, the ethylene-vinyl acetate copolymer of Igarashi et al. is an olefin-vinyl ester copolymer since ethylene is an olefin.

In regard to claims 4 and 5, Igarashi et al. teach that the tubular structure contains an ethylene-vinyl acetate copolymer (col. 3, lines 32-35 and col. 4, lines 22-26).

In regard to claim 6, Igarashi et al. teach that the composition contains not more than 250 parts by weight of the ethylene-vinyl acetate copolymer per 100 parts by weight of the second resin of the composition (the "CPA" resin of Igarashi et al., col. 3, lines 48-51), a range that overlaps with the claimed range of about 30 to 75% ethylene-vinyl acetate copolymer (e.g.  $90/(90+100) = \text{about } 47\%$ ). Igarashi et al. teach that the composition contains up to 70 parts rubber additive per 100 parts CPA (col. 3, line 64-col. 4, line 7), a range that falls within the claimed range of about 25 to 70% (e.g.  $70/(70+90+100) = \text{about } 27\%$ ).

In regard to claims 7 and 8, Igarashi et al. teach that the rubber additive is a process aid (see col. 3, lines 64-66) and that the rubber additive is a polyethylene (col. 3, lines 64-68).

In regard to claim 9, Igarashi et al. teach that the composition further comprises EPDM or NBR (col. 3, line 64-col. 4, line 4).

Art Unit: 1772

In regard to claim 10, Igarashi et al. teach a vulcanized automotive fluid-conveying tubular structure (hose, col. 5, lines 49-50 and col. 2, lines 54-57) comprising an ethylene-vinyl acetate copolymer (col. 3, lines 32-35 and col. 4, lines 22-26) having a vinyl acetate content of more than 60% vinyl acetate by weight of the copolymer since Igarashi et al. teach that the ethylene-vinyl acetate copolymer contains not more than 40 mol % ethylene (consequently, at least 60 mol % vinyl acetate, col. 3, lines 39-41). Igarashi et al. teach that the composition comprises a rubber additive and a second resin (the "CPA" resin of Igarashi et al.) that corresponds to an additive as claimed by Applicant. Igarashi et al. teach that the rubber additive is a process aid (see col. 3, lines 64-66) and that the rubber additive is a polyethylene (col. 3, lines 64-68). Igarashi et al. teach that the composition contains not more than 250 parts by weight of the ethylene-vinyl acetate copolymer per 100 parts by weight of the second resin of the composition (the "CPA" resin of Igarashi et al., col. 3, lines 48-51) and that the composition contains up to 70 parts of the rubber additive per 100 parts CPA (col. 3, line 64-col. 4, line 7), so the claimed relative amount ranges overlap with the relative amount ranges taught by Igarashi et al. (e.g.  $150 \text{ parts copolymer} / (150 + 100 + 50) = 50\%$  and  $(100 + 50) / (150 + 100 + 50) = 50\%$ ).

In regard to claim 20, Igarashi et al. teach a vulcanized tubular structure (hose, col. 5, lines 49-50) comprising a composition containing ethylene-vinyl acetate copolymer (col. 3, lines 32-35 and col. 4, lines 22-26) where the ethylene-vinyl acetate copolymer contains greater than 40% vinyl acetate based on the weight of the copolymer (col. 3, lines 48-51). Igarashi et al. teach that the tubular structure is automotive fluid-conveying (col. 2, lines 54-57). The tubular structure of Igarashi et al. is heat tolerant because Igarashi et al. teach that the tubular structure is heat resistant (col. 2, lines 50-54). Any hose is resistant to some degree of pressure, so the hose

Art Unit: 1772

of Igarashi et al. is necessarily resistant to some degree of pressure. The tubular structure of Igarashi et al. is hydrocarbon fluid impermeable since Igarashi et al. teach that the tubular structure is gas impermeable (col. 2, lines 50-53). Igarashi et al. teach that the composition contains a rubber additive that is a process aid (see col. 3, line 64--col. 4, line 7). In regard to claims 21 and 22, Igarashi et al. teach the hose as discussed above. The recitations "is a radiator hose" and "is a heater hose" are intended use recitations that have not been given patentable weight, since it has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQd 1647 (1987).

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 571-272-1488. The examiner can normally be reached on Monday-Thursday from 9:00am to 6:00pm and on alternate Fridays from 9:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Application/Control Number: 10/663,324

Page 7


Art Unit: 1772

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter B. Aughenbaugh

09/30/05

WBA

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

9/30/05